ABSTRACT OF DISCLOSURE

A flexible electronic asset management system using Ethernet connectivity for electronic devices is presented. The invention enables multiple electronic devices to be controlled, monitored, and accessed from any browser connected to a computer network. A flattened stack approach is used to process network packet data. The flattened stack approach treats the network packet as a single string of data and uses the first few bytes of information to decide whether to drop or process the incoming data thus providing for faster network traffic processing. Since the lowest layer of the OSI stack has knowledge of what applications are active in the upper layers, the flattened stack allows the packet to be discarded at the earliest possible point so no processing power is wasted. The flattened stack also organizes its check/processing based on the raw data stream thus minimizing buffer requirements and providing for easier implementation into hardware.